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The CHANGE Project/The Manoff Group, Inc. 2618

Improving Routine Immunization in Africa
The CHANGE Project

Introduction

Despite progress in polio eradication and other disease-control activities, half or more of the children in many African countries have not completed their basic series of vaccinations by the time they reach their first birthday. Such low rates of routine immunization coverage are very troubling for many reasons:

- Each year low routine immunization coverage exposes millions of African children to easily preventable disease and death.
- Low routine coverage may well delay reaching polio eradication and other disease-control and eradication goals.
- A well functioning vaccine delivery system is needed for incorporating new and under-used vaccines (particularly hepatitis B, Hib, and yellow fever) as well as future vaccines against major global killers such as malaria and HIV/AIDS.

Why are there so many unvaccinated and partially vaccinated children in Africa? Although the following categories of reasons for no vaccinations or incomplete vaccination are not mutually exclusive, they are nonetheless a useful framework for analysis and planning appropriate actions. Families of children who are not fully immunized by their first birthday are likely to belong to one (or more) of the following categories:

The displeased: These are people who have brought young children for one or more immunizations but who experienced service-quality problems that led to their unwillingness to return for additional immunizations. In some of these unpleasant visits, the child was immunized but the caretaker and child had to endure:

- long and/or disorganized waits;
- verbal abuse by health staff because the caretaker forgot the immunization record, was late in bringing the child, or the child was dirty or not well dressed;
- poor vaccination technique that caused an abscess or other discomfort;
- unauthorized monetary charges by health staff;
- poor communication by the health staff about when a child's next vaccination was due.

In other cases, the child was not vaccinated because:

- the facility was closed, staff had not shown up, or needed vaccine or equipment was not there; or
- the health worker refused to immunize because the caretaker forgot the immunization record or because the child was sick.

Thus, children of the displeased could be fully immunized, but quality-of-service problems prevent this from happening.

The alienated: Migrants and people from minority cultural groups, including people who are residing illegally, may not have their children immunized because they do not feel welcome at health facilities (e.g., where staff do not speak their language) and/or they fear the legal consequences of using any official government services.

The too busy: People with competing priorities—doing agricultural work, attending funerals, watching many children, working fixed hours and days when they cannot get permission to be absent from work—comprise this category. Having their children immunized is extremely difficult because immunizations are not available at times when they might bring them.

The misinformed: Some caretakers do not have their children fully or even partially immunized because they lack accurate information. People may not know when and where immunizations are available or about how important they are. Some caretakers may also not understand information given to them about when to bring the child back; they cannot tell when the return date has arrived (because they do not understand dates or months); or they miss a scheduled immunization date and do not know they should bring their child as soon as possible afterwards. People may believe that:

- their children are already safe from vaccine-preventable diseases because of God's or some other religious protection;
- their children are already protected because they have received some immunizations;
- immunizations are dangerous because they cause sterilization, disease, or serious side effects;
- sick children cannot be immunized;
- vaccinators will come to their homes or communities to give any needed immunizations, as they do in immunization campaigns.

Thus, these caretakers do not take action because they lack clear and correct information.

The unconvinced: Some caretakers with good information may still not be convinced of the safety of, need for, or social, cultural, or religious acceptability of bringing their children for immunizations.. People may have concerns about injection safety or of the potency of the vaccine given in the public health system. If they are sufficiently motivated, such caretakers still have several options; e.g., to purchase needles and syringes from a reputable place, have their children immunized by private physicians, etc. Thus, children of the unconvinced could be fully immunized, but their caretakers are not sufficiently motivated to overcome negative beliefs and perceptions.

The unreached: In every country, some portion of the population has poor access to services because there are no routine immunization services near their homes. While most of these families live in permanent communities, others are on the move (e.g., nomads, seasonal migrants). Thus, lack of geographical accessibility causes the unreached to have no or incomplete immunization.

How the CHANGE Project Might Help

CHANGE would be pleased either to help solve an immediate, already-identified behavior-related problem with routine immunization, bringing to bear experience from a wide breadth of countries, or to facilitate a more systematic analysis of coverage problems and actions to address priority issues. CHANGE could work at the national and/or sub-national level to help the EPI analyze the nature of its partial and non-immunization problem, and to develop, test, implement, and evaluate solutions.

In the process of this collaboration, CHANGE hopes to achieve two important sub-objectives: 1) to improve the EPI staff's capabilities to select and use tools and approaches to carry out such a process, and 2) to apply and assess the use of innovative or underused tools and approaches.

The remainder of this proposal summarizes the major steps envisioned.

Step 1: Select the Sites

In CHANGE's ongoing contact with African regional and country-level personnel working in immunization, and in conversations with USAID/Washington, a number of possible sites for this activity have been mentioned, including Ghana, Tanzania, Malawi, and Ethiopia. The next step for country selection might be for the CHANGE CTO to contact the USAID Mission staff to learn their opinion on the need for CHANGE assistance on behavioral issues related to increasing routine immunization coverage in the country.

For those countries that appear to be promising, the next step would be for CHANGE or the USAID Mission to contact the EPI Program Managers and/or Ministry official in charge of child health to assess their interest. CHANGE would then propose a short planning visit to two or three countries, no more than two of which would be selected. Before this visit took place, CHANGE would inform and get feedback from WHO and UNICEF regional, sub-regional and country offices. During a second, longer visit to the two selected countries, CHANGE will work with country staff to: (1) describe the coverage problems, (2) assess what is known about the causes (step 2) and then prepare a plan for CHANGE collaboration, (3) draft a work plan with next steps.

Step 2: Describe the Problem and Assess What Is Known about the Causes

Based on existing documents and a key informant interviews, CHANGE and the EPI staff would describe the immunization problems of concern as completely (and quantitatively) as possible.

What are the problems? For example:

- low BCG/DPT1/OPV1 coverage, indicating poor access to services
- high dropout rates, as indicated by a drop of more than 10% from BCG to DPT3 or measles
- stagnant or declining routine coverage.

Where are the problems? For example:

- which districts, provinces, regions of the country
- which ethnic or other population subgroups (urban slum dwellers, nomads, particular religious groups).

Next, CHANGE would help assess how much and what the EPI already knows about the **causes** of the problems identified. Does the EPI have a good idea of what percentage of the unimmunized or dropouts can be categorized as "displeased," "alienated," "too busy," "misinformed," "unconvinced," and "unreached"? CHANGE will help examine existing studies and assessments to all that is known about the causes of problems and to judge if it is sufficient to

formulate coherent and effective responses.

At this point, CHANGE might: (1) help design some rapid additional information-gathering, or (2) move directly into testing interventions via TIPs (trials of improved behaviors, or behavioral trials) or a small pilot activity.

Step 3: Carry Out New Consultative Research, If Necessary

If new information-gathering is needed, CHANGE would help plan and carry it out. This research would:

- use primarily qualitative methods but also quantitative ones if the EPI cannot prioritize among many potential causes of problems;
- be rapid, i.e. take no more than a few weeks in the field;
- use a small, purposive sample of the key target groups;
- include representation of both doers and non-doers from each target group; e.g., for mothers and other caretakers from a particular geographic or cultural/religious group, include both mothers of fully immunized children and mothers of partially or completely non-immunized children;
- be focused, i.e., only gather information related to the three key questions of:

- Why are people behaving as they do?
- What are the major attitudes and practical reasons (including lack of practical knowledge and difficult access) blocking more healthful practices?
- How the EPI can best help reduce barriers and motivate more healthful practices? As far as communication activities are a part of this solution, what is the key information needed and how can it be most given effectively and precisely?

This phase may also include some innovative approaches to plan effective program actions that will promote behavior change. For example, two possibilities are:

- Use trials of improved practices (TIPs) to learn the best ways of improving health worker behaviors related to immunization;
- Organize joint caretaker/provider discussion groups for the purpose of "problem-solving" around some of the problems revealed by the research.

Step 4: Move from Information to Action

Bring together representatives of all the major organizations and groups likely to participate in actions that aim to increase coverage or reduce dropouts. Present the research findings on the three main questions. As a group, prioritize which are the most important problems, the key target groups that must be addressed, and the key actions for each. Because human and financial resources are unlikely to be sufficient to do everything, this is the time to prioritize problems, actions, and geographical areas.

Prepare a plan of action with tasks, responsibilities, resources, and dates. Make sure it is clear who will manage activities and who will help implement them. Try to make a reasonable division

between actions best taken at the national level and actions best planned and implemented at the local level. Prepare a plan for monitoring the actions in order to: assess the need for and nature of adjustments, and evaluate impact on (1) reducing key barriers to immunization and (2) motivating various groups to carry out the behaviors promoted for improving coverage.

It is likely that CHANGE itself would focus on improving aspects of service quality (particularly health worker behaviors) as well as on communication and actions to better mobilize community leaders and structures and to motivate and give essential information to the public. For other needed actions, the Ministry of Health would probably rely on its own resources and other sources of funding and technical assistance (e.g., for extending the service network, training/retraining staff on contraindications, correct injection technique, and injection safety).

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